

FIGURE 1. Concentration of IFN γ , IL-4 and IL-5 in spleen cell supernatants of mice infected with *M. avium*, *S. mansoni* or both organisms. Splenocytes (4×10^5 /well) were cultured *in vitro* for 48h at 37°C in 200 μ l medium in the presence or absence of optimal concentrations of PPD or soluble schistosome egg antigen (SEA). Cytokine secretion was quantified by ELISA.

Figure 1

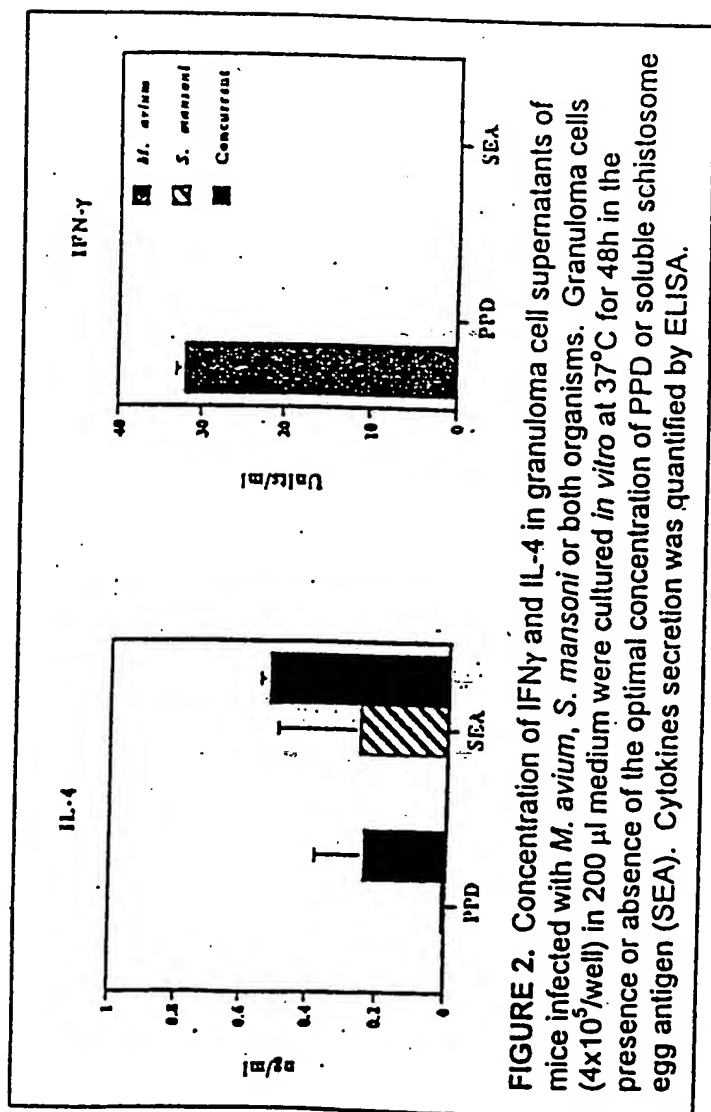


FIGURE 2. Concentration of IFN γ and IL-4 in granuloma cell supernatants of mice infected with *M. avium*, *S. mansoni* or both organisms. Granuloma cells (4×10^5 /well) in 200 μ l medium were cultured *in vitro* at 37°C for 48h in the presence or absence of the optimal concentration of PPD or soluble schistosome egg antigen (SEA). Cytokines secretion was quantified by ELISA.

Figure 2

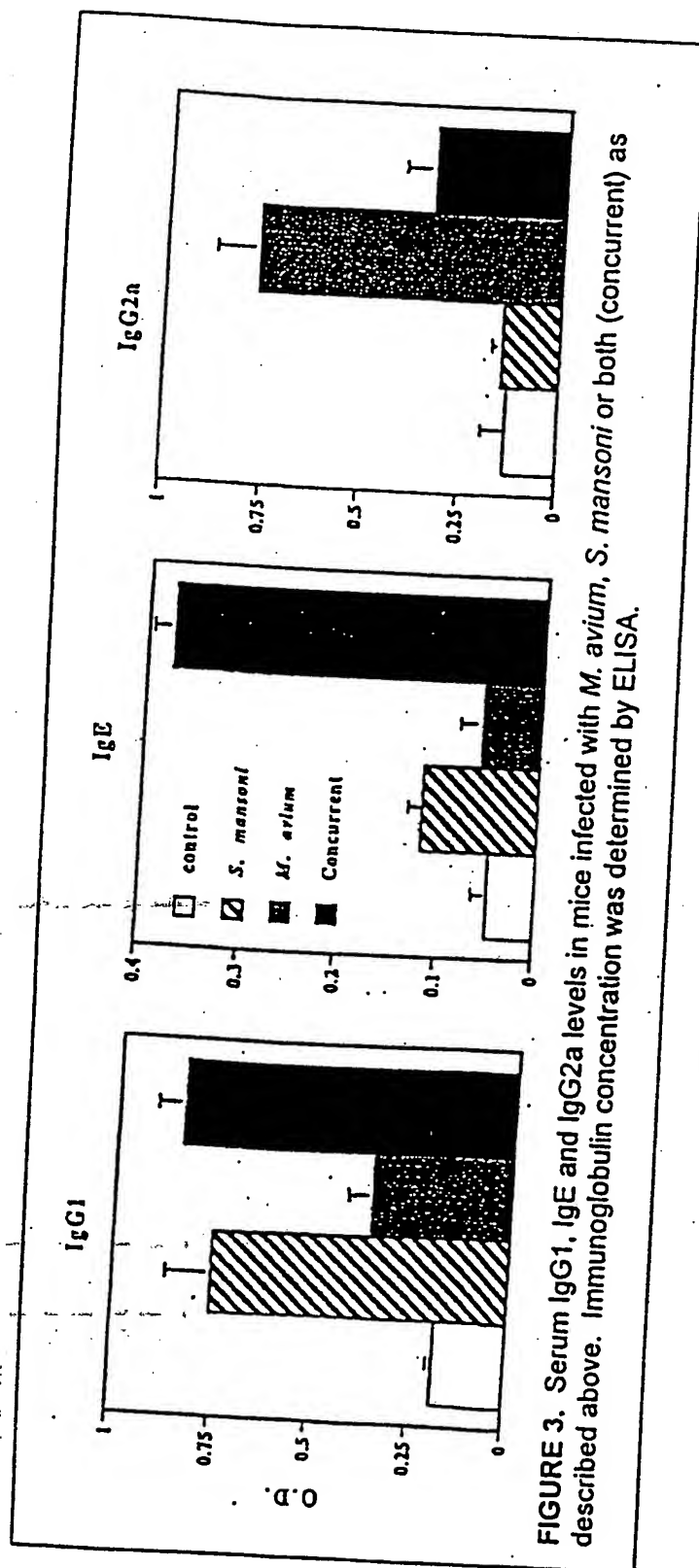


FIGURE 3. Serum IgG1, IgE and IgG2a levels in mice infected with *M. avium*, *S. mansoni* or both (concurrent) as described above. Immunoglobulin concentration was determined by ELISA.

Figure 3

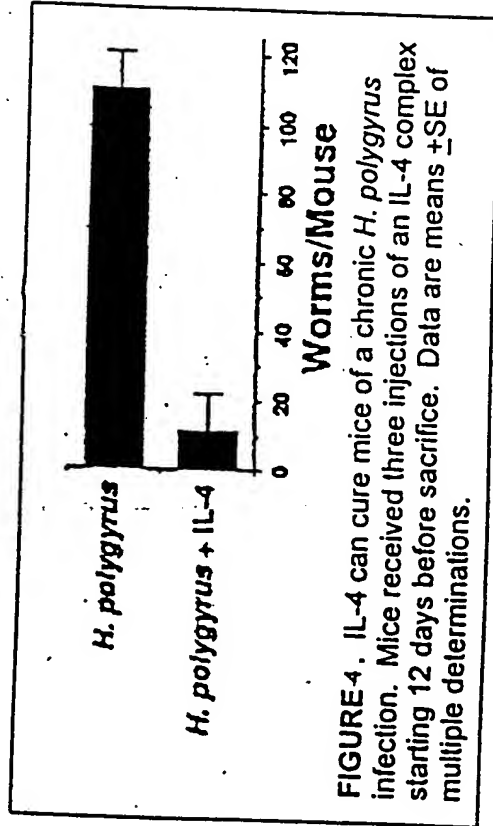


FIGURE 4. IL-4 can cure mice of a chronic *H. polygyrus* infection. Mice received three injections of an IL-4 complex starting 12 days before sacrifice. Data are means \pm SE of multiple determinations.

Figure 4

**MICE PREVIOUSLY COLONIZED
WITH AN INTESTINAL HELMINTH
DEVELOP ATTENUATED TNBS
COLITIS**

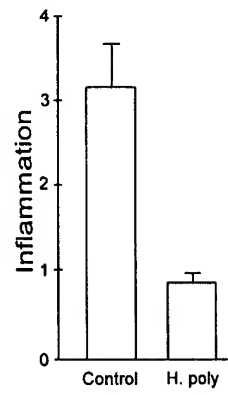


Fig 5

**COLONIZATION WITH *H. POLYGYRUS* INHIBITS
MUCOSA
IFN γ REPONSIVENESS**

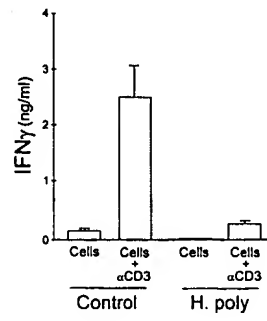


Fig 6

***H. POLYGYRUS* BLOCKS
MUCOSA IL12 SYNTHESIS**

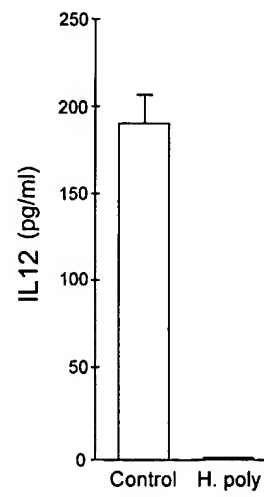


Fig 7

**COLONIZATION WITH *H. POLYGYRUS* PROMOTES
MUCOSA IL10 PRODUCTION**

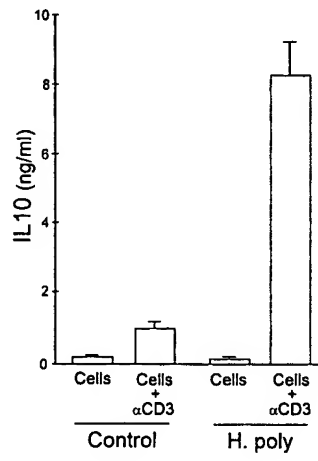


Fig 8

**BLOCKADE OF IL10R
ENHANCES LPMC IFN γ
PRODUCTION**

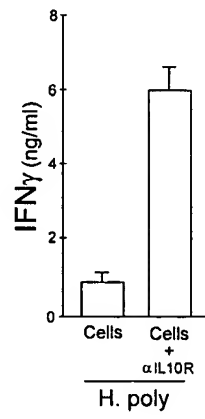


Fig 9

**COLONIZATION WITH *H. POLYGYRUS* PROMOTES
MUCOSA PGE₂
PRODUCTION**

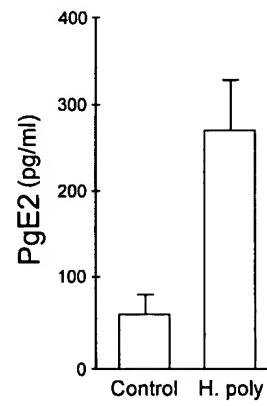


Fig 10

COLONIZATION WITH *H. POLYGYRUS* PROMOTES MUCOSA IL4, IL5 AND IL13 PRODUCTION

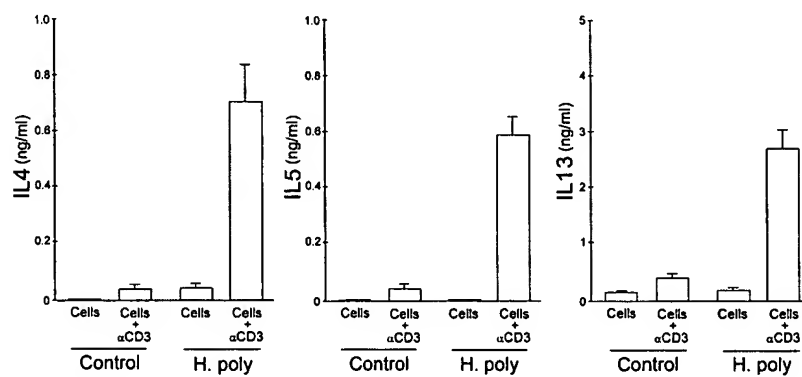


Fig 11

**COLONIZATION WITH *H. POLYGYRUS* PROMOTES
MUCOSA TGF β PRODUCTION**

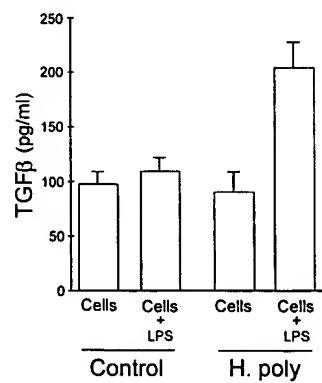


Fig 12

**T CELLS MAKE THE IFN γ IN
THE INTESTINAL MUCOSA OF
HEALTHY WT MICE**

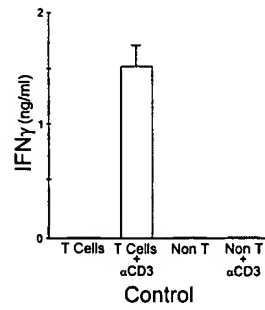


Fig 13

TRANSFER OF MLN CELLS FROM *H* POLYGYRUS-BEARING MICE INTO UNINFECTED WT MICE INHIBITS LPMC IFN γ RESPONSIVENESS

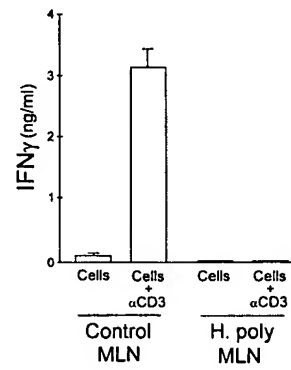


Fig 14

**MLN T CELLS FROM MICE BEARING *H. POLYGYRUS* ENTER GUT MUCOSA
WHEN TRANSFERRED INTO WT
RECIPIENTS**

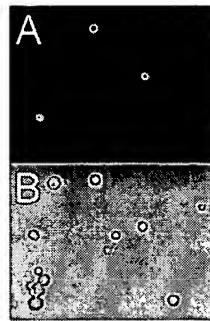


Fig 15

**PIROXICAM-INDUCED COLITIS IN
IL10^{-/-} MICE**

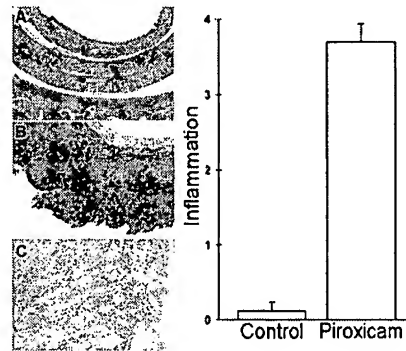


Fig 16

***H. POLYGYRUS* REVERSES ESTABLISHED ACTIVE
PIROXICAM-INDUCED IL10^{-/-} COLITIS**

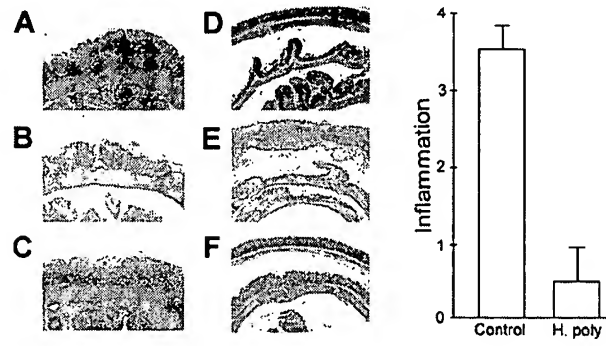


Fig 17

***H. POLYGYRUS* BLOCKS LPMC IFN γ AND
IL12 PRODUCTION IN IL10 $^{-/-}$ COLITIS**

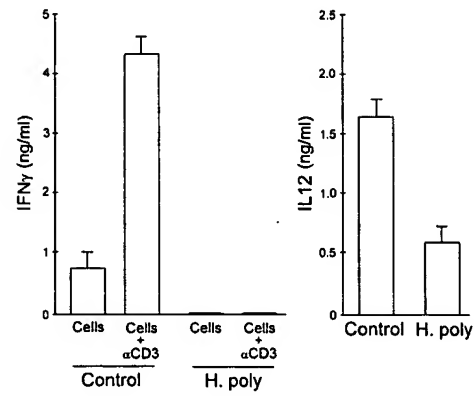


Fig 18

***H. POLYGYRUS* AUGMENTS LPMC IL4 AND IL13
PRODUCTION IN IL10^{-/-} COLITIS**

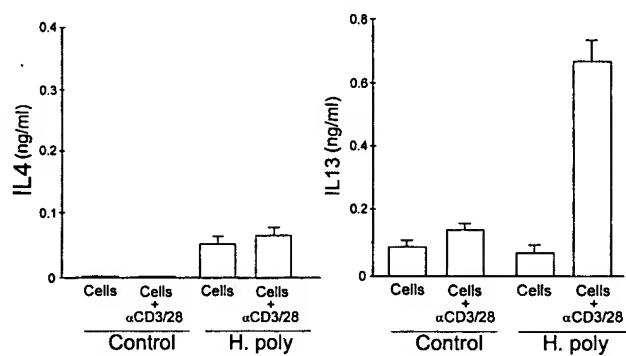


Fig 19

**MLN CELLS FROM IL10KO MICE
COLONIZATION WITH *H.*
POLYGYRUS INHIBIT ACTIVE
IL10KO IBD**

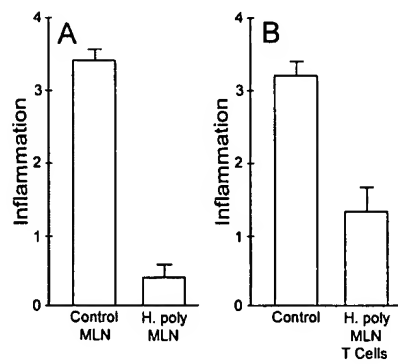


Fig 20

***H. POLYGYRUS* AUGMENTS MLN
CELL EXPRESSION OF *Foxp3*
mRNA AS MEASURED WITH
REAL TIME RT-PCR**

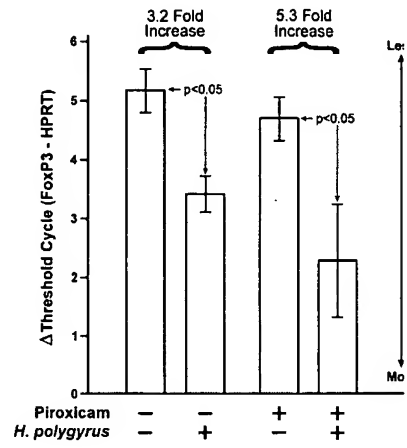


Fig 21

***H. POLYGYRUS* REDUCES MLN
CELL EXPRESSION OF *Smad7*
mRNA AS MEASURED WITH
REAL TIME RT-PCR**

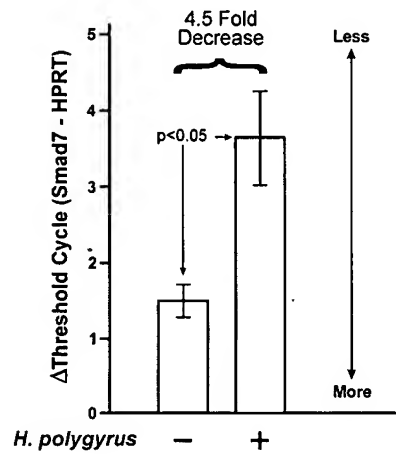


Fig 22

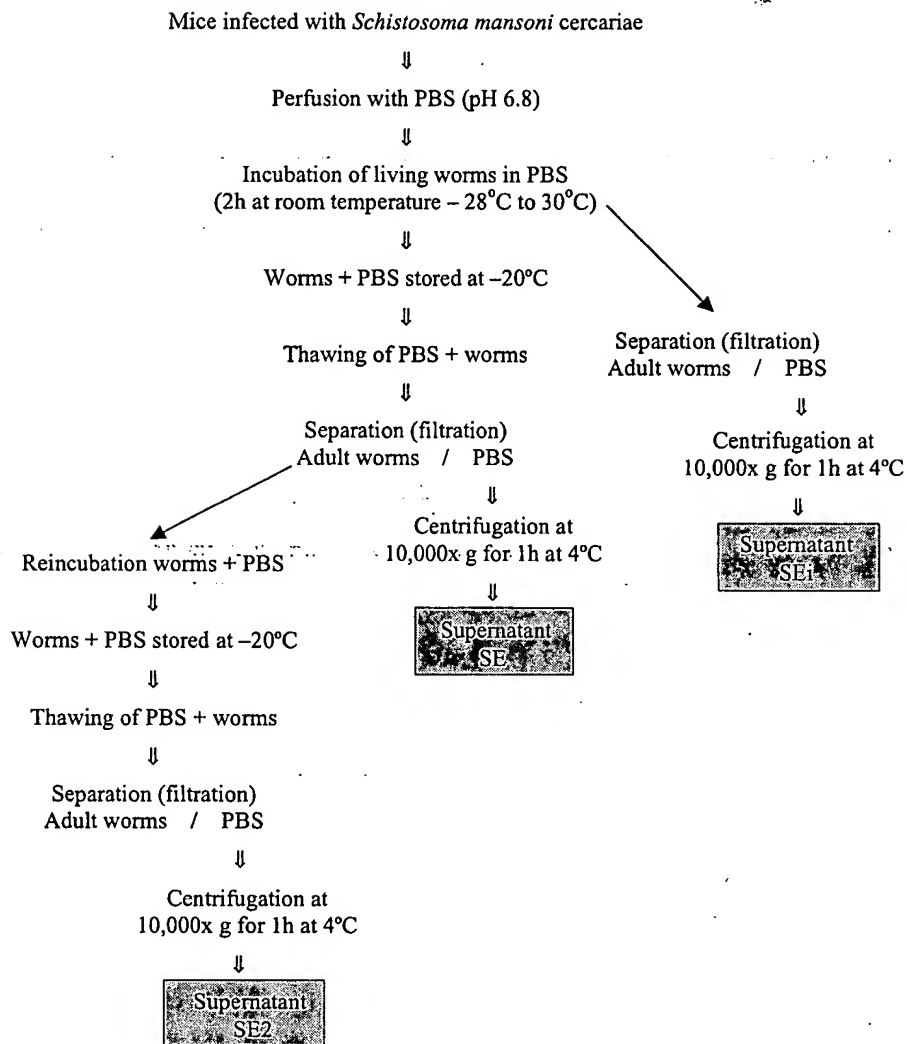


Fig. 1: antigens - diagram of extraction procedures

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☒ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.